



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,228	12/16/2003	Gary Macchile	1905/31	6379

23638 7590 01/10/2006

ADAMS EVANS P.A.  
2180 TWO WACHOVIA CENTER  
CHARLOTTE, NC 28282

EXAMINER
----------

COONEY, JOHN M

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/737,228

Applicant(s)

MAECHTLE ET AL.

Examiner

John m. Cooney

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0104</u> . | 6) <input type="checkbox"/> Other: _____  |

***Election/Restrictions***

Applicant's election without traverse of Group 1. (claims 1-8) in the reply filed on 10-25-05 is acknowledged.

Claim 9 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10-25-05.

This application contains claim 9 drawn to an invention nonelected with traverse in Paper No. 1005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' claims are confusing as to intent because it can not be definitively determined which components of the claims are intended to provide the hydrophobic liquid component referred to in the preambles of the claims. The claims and their supporting disclosure provide no means of determining which components of the claims

Art Unit: 1711

are and/or are not the hydrophobic liquid components referred to in the preamble of the claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Hibino et al. (2003/0078312).

Hibino et al. discloses preparations of rigid polyurethane foams using HFC-245fa as the blowing agent prepared by mixing and reacting isocyanate, polyether and polyester polyols as claimed, and additives and modifiers reading on the identified modifiers and additives of applicants' claims (see abstract, paragraphs [0001],[0002], [0004],[0009],[0010],[0013]-[0016], [0019]-[0031], and examples 31-54, as well as, the entire document).

Although the ranges of molecular weight values for the polyols of applicants' claims are not particularly set forth by Hibino et al.'s disclosure, these ranges of values are seen to be inherently met by the teachings of Hibino et al. based on the KOH values of the polyol blends of their examples.

Although Hibino et al. is not particularly concerned with indicating the hydrophobic nature of each of its components, it is held that such a condition is inherent to the teachings of Hibino et al. based on the physical make-up of the indicated blowing agent, reactant, catalyst, modifier, and additive materials disclosed by Hibino et al.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hinz et al.(5,552,450) in view of Takeyasu et al.(6,043,241).

Hinz et al. disclose preparations of rigid polyurethane foams which may be formed by using highly fluorinated compounds as blowing agents prepared by mixing and reacting isocyanate, polyether and polyester polyols as claimed, and additives and modifiers reading on the identified modifiers and additives of applicants' claims (see abstract, column 2, column 4 line 4 – column 11 line 10, as well as, the entire document).

Hinz et al. differs from the claims in that HFC-245fa is not particularly employed or required. However, Takeyasu et al. discloses the employment of HFC-245fa in the making of rigid polyurethane foams for the purpose of imparting its blowing effect with reduced environmental consequences (see abstract, column 1 line 38 – column 2 line

Art Unit: 1711

50, and column 6 lines 36-43, as well as, the entire document). Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the HFC-245fa blowing agent of Takeyasu et al. as a highly fluorinated blowing agent used in the preparations of Hinz et al. for the purpose of imparting their blowing effect with reduced environmental consequences in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

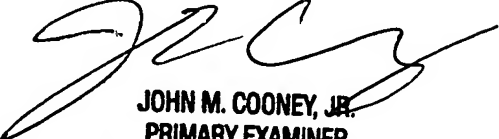
Hinz et al. additionally differs from applicants' claims in that polyester polyols or blends of polyether and polyester polyols are not particularly required. However, Hinz et al. (see again column 5 line 30 – column 6 line 38) particularly recites employment of polyester polyols, particularly having molecular weights of from 600-1500, in combination with the polyether polyols of Hinz et al. for the purpose of providing their isocyanate reactant rigid foam forming effect. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the polyester polyols disclosed by Hinz et al. in the making of the products of Hinz et al. for the purpose of imparting their isocyanate reactive rigid foam forming effect in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Cooney whose telephone number is 571-272-1070. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**JOHN M. COONEY, JR.**  
**PRIMARY EXAMINER**  
Group 1700